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Sociobiological and Psychosocial Models of Physical Attractiveness Phenomena: A Confrontation of Theories

**SOCIOBIOLOGICAL AND PSYCHOSOCIAL
MODELS OF PHYSICAL ATTRACTIVENESS
PHENOMENA: A CONFRONTATION OF THEORIES**

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A majority of cultural anthropologists underestimate the value of sociobiological theory for a better understanding of human behavior. This essay attempts to demonstrate the shortcomings of this position by presenting an illustrative problem. Sexually asymmetrical physical attractiveness phenomena are examined first from a traditional psychosocial model. In its pure form this model is unable to account for the known data; when supplemented by sociobiological premises, however, these difficulties are resolved.

Key Words: Sociobiology; physical attractiveness; homosexuality

INTRODUCTION

Lieberman (1989:677) recently surveyed anthropologists to determine "the degree to which they believed that each of six concepts [of sociobiology] would be useful for future research on human behavior." Among cultural anthropologists, "an average of 46% reject the four core concepts" of kin selection, reciprocal altruism, the genetic basis of altruism, and male-female reproductive strategies.

This high rate of outright rejection, however, does not inform us as to what the respondents were thinking. Some, perhaps, consider sociobiology not to be "true" in some sense and reason that that which is not true cannot in turn be "useful." This reasoning may or may not be valid, especially depending on what is meant by a theory's being "true." It is, however, not the intent of this short and informal essay to ponder too very deeply the philosophical status of scientific theories. For our purposes, however, we may state that any theory which accurately models data and generates verified predictions is "true" in some nontrivial sense, and hence is potentially "useful."

Some of those who reject sociobiology may be inclined to concede its truthfulness but may feel that its degree of truth (as defined above) is less, relative to the primary theoretical perspective of the respondent. In other words, whatever theory the anthropologist currently

holds does as well, or better, at modeling data and generating verified predictions than does sociobiology. Hence the latter's perceived lack of usefulness.

Anthropologists are not to be faulted for having this view of affairs. Most of the sociobiological literature is aimed at demonstrating its absolute truthfulness and only very rarely its truthfulness relative to other, competing theories. There seems to be no problem successfully addressed by sociobiology which cannot also be examined within the scope of another, non-biological model. What is lacking, then, is the type of study which pits sociobiology against one or another popular approach. To the degree that anthropologists are scientists and not preachers of revealed truths, the simultaneous failure of their championed paradigm and the success of sociobiology on the same body of data should compel them to reevaluate their negative stance toward the latter.

This essay attempts just such comparison. It presents a well-established, largely uncontested body of data from the field of social psychology--the phenomena of physical attractiveness, and the male-female differences therein. Competing explanations are offered from the theories first of psychosocial sex-role socialization and then from sociobiology. One theory shall be seen to be more truthful than the other and hence more useful. An experimental approach to this same problem has already been completed (Donovan, Hill, and Jankowiak 1988); the tactic herein, however, is purely logical.

PHYSICAL ATTRACTIVENESS

A wealth of data exists on what is commonly termed the "physical attractiveness phenomena." The effects of this personal attribute seemingly pervade every aspect of a person's life, from interpersonal relations--both on and off the job--to intrapersonal characteristics, and much of this despite the subject's protestations to the contrary.

A good percentage of the current literature is designed to test--with ultimate substantiation--the Greek adage that "what is beautiful is good." Speaking generally, Patzer (1985:42) states the findings of physical attractiveness [PA] research to include the following:

1. Greater social power is experienced by those of higher as opposed to lower physical attractiveness;
2. All other things being equal, individuals of higher physical attractiveness are better liked than those of lower physical attractiveness;

3. People of higher physical attractiveness are assumed to possess more positive and favorable characteristics than their counterparts of lower physical attractiveness; and
4. Those higher in physical attractiveness have different effects on others and receive different responses from others than those lower in physical attractiveness.

In a very tidy work, Webster and Driskell (1983:144) offer the observation that "the effects of attractiveness seem similar to the effects of the cultural stereotypes that are associated with race and sex." In other words, PA is just one of a set of markers from which persons infer, among other things, "ideas of task competencies." As such, PA should conform to a strictly defined set of rules required of such markers (e.g., their version of the theory of status characteristics and expectation states adopted from Humphreys and Berger).

Their findings from testing this "beauty as status" hypothesis include the lack of significant effects between sex of stimulus or sex of respondent and perception of the PA halo effects. This is especially relevant because it allows them to dismiss the common assumption that PA phenomena are by-products necessarily of sexual attraction. To recognize a given subject's cue as high status, in other words, is not necessarily the same as to feel a physical attraction toward the subject. Heise (1984) makes essentially the same point when she distinguishes between being sexy and being aesthetically pleasing.

But, although this social theory is very helpful in explaining PA phenomena generally and its interactions with other status markers specifically, it does not--nor do the authors claim that it will--explain all PA phenomena. The status theory of beauty is applicable by definition to only those instances where sex of subject and sex of respondent do not statistically interact. Although a sizable amount of PA phenomena falls within this category, a significant group of findings do not, and it is here that our test of theories shall occur.

In many circumstances, the effects of PA are sex-dependent. For instance, Walster and Walster (1971:185) report that PA "is not to be related to dating frequency for men, but rather to general friendship popularity," while "the reverse seems to be true for women," and Patzer (1985:127) states that "the contrast in self-concepts between females of lower and higher physical attractiveness is significantly greater than the contrast exhibited for their male

counterparts."

There can also be no denying that female PA is a much more immediate concern for both society and its constituent individuals than is male PA. This conclusion is not only supported by data from our own, contemporary culture, but it is also one of the few general conclusions allowed by Ford and Beach (1951) in their cross-cultural examination of standards of beauty. This concern for female PA is so potent, in fact, that unattractive females--apparently stressed by the implications of their low PA--have "significantly higher mean [blood] pressures than attractive females," which relationship does not hold for males (Hansell, Sparacino, and Ross 1982).

Why females should be so concerned about their PA levels should be no mystery. Simply put, how attractive a woman is physically immediately impacts her ability to obtain a desirable mate. As Buss and Barnes (1986:567) reveal, physically attractive was more preferred by men than by women ($p < .0001$) as a desirable mate characteristic. In contrast, good earning capacity ($p < .0001$) and college graduate ($p < .004$) were more preferred by women than by men as characteristics in mates.

This asymmetrical emphasis on PA by men toward women goes a long way toward explaining such cultural features as the relative lack of pornography directed toward women. All things considered, PA is primarily a quality demanded by men from their mates and which women offer accordingly; from their own side, women exact their demands in other coin unrelated to PA (although not necessarily unrelated to visual cues).

PSYCHOSOCIOLOGICAL INTERPRETATION

One possible explanation for this emphasis on female PA might be that:

... while physical attractiveness functions for women as an indicator of their degree of successful role fulfillment, the indicators of successful fulfillment of a man's role do not include physical attractiveness. It is therefore not surprising that our society values a woman's beauty and that the evaluation of a woman depends so much on her physical attractiveness (Bar-Tal and Saxe 1976:131).

The implication here would seem to be that, unlike males, females emphasize PA as part and parcel of the stereotyped sex-role they are taught. The depiction of females' accentuation of their PA as fundamentally learned behavior must carry with it the corollary that male

evaluation of female PA is also learned behavior.

In specifics, of course, this latter point is certainly true: since there is cultural variation in standards of beauty, males must learn the appropriate measures, it would seem. But in the more general sense—that males learn that female PA is more important than their own, and that females learn the same thing—this essentiality of PA evaluation as learned behavior may be questioned.

It seems legitimate to infer from feminists' concern with the differential treatment of females from birth onwards, and from psychotherapy's interest in early life histories, that these early experiences exert a very potent effect upon the infant. What is learned at this time is conceivably more powerful than what is learned later, a circumstance understandable in that these are the formative years of identity formation. Were this inequality of impact not the case, then later instruction should be expected to easily alter old patterns, and society as a whole would be more amenable to fundamental change. As it is, though, once a pattern of behavior is incorporated into the identity of self, later information is interpreted according to the earlier learning, effecting only minor alterations. Only rarely is a true paradigm revolution of self likely to occur.

Given, then, the primacy of early learning, one might look next at the sequence of that learning. As many scholars (e.g., Freud) have pointed out, the infant begins life totally self-absorbed and only gradually expands his/her universe to include others. A perhaps more accurate depiction of the process, in fact, would be that the infant's self is the universe; socialization entails learning where to make cuts in the universe to separate self from others and then later cuts to distinguish sundry types of others.

Consequently, the first data received would be those regarding his/her own self: what is appropriate for that child. While an outside observer may conclude that a female infant is treated differently from a male infant, the infant himself is incapable of organizing his experiences in such a way; he learns only how he is expected to behave. [Hence-forth, the subject at issue shall be referred to with masculine pronouns to avoid awkward constructions.]

An idealized progression of the expansion of awareness, and thereby segmentation of reality, would have the first step in expectant behaviors to fall into a +self/-self dichotomy, with these quickly being redefined as +male/-male or +female/-female, depending on the sex of the child. For instance, a male child will expect another male child to behave as he would himself (at around three or four years of age, by which time the child will have acquired ideas of both gender identity and gender constancy; cf. Huffman, Vernoy, and Williams 1987). Females, from his view, would be expected to behave in a -male way, or, in other words, in a way radically dissimilar to himself but within the spectrum of appropriate human behavior. Only later would the child learn positive cross-gender behavioral expectations, as he matures and his realm of experience becomes more precisely defined and focused (i.e., -male is rearticulated as +female/-female).

The distinction between these phases of cognition might be illustrated by the strategies used to enforce gender-appropriate behaviors. In the state of simple dichotomy, for instance, a girl would be most strongly criticized in terms of crossing -female boundaries all the way into +male (from the perspective of the supervising adults). As outrageously stereotypical examples, it might be held to be bad enough for a girl to beat up on other girls but intolerable that she should beat up boys as well. The criticism here is a push away from inappropriate (-female/+male) behaviors ("Only boys fight"). Later criticism of gender-inappropriate behavior would assume the character of a pull towards the +female ("Only men work" becomes less effective than "But wouldn't you rather raise a family than work?").

The major point here is that if early learning is more fundamental than later learning and if one learns appropriate behavioral expectations for the self before positive expectations are learned for others, then the expectations of self should be more fundamental than expectations of others. If--for the sake of argument--this conclusion is allowed, the failing of social theory to adequately account for the differential value of male as opposed to female PA may be shown.

According to Bar-Tal and Saxe (1976), one could conclude that females learn to place a high value on PA as a part of their expectation of self and later learn nothing comparable about male PA; males, apparently, undergo just the reverse, having no particular emphasis placed on

their own PA as a part of expectation of self, or even learning explicitly that their PA is unimportant, but later learning that high PA is a +female attribute. The final result is that males value high PA in females who not incoidentally are demanding high PA from themselves, while PA of men is a nice but not requisite attritute; as Heise (1984:371) puts it, "Men in most settings are not aesthetically in the running."

As stated, this theory will accurately model male/female interactions. But if it serves to describe heterosexual expectations, in the case of male homosexuality the situation immediately reaches an impasse if males demand high PA from other males but regard it as negligible from themselves. Clearly, one or the other of the two expectations must change.

At work here is an assumption which should be made explicit. I am suggesting that males have been taught that high PA is a +female attribute and that females are the assumed sex object choice. When males deviate (in the statistical sense) from this, they bring to the new object choice the same expectations they were taught to expect from those -self. Hence, homosexual males will expect high PA in other males (a -self attribute generally for males) without demanding it from themselves. This conclusion is in keeping with the premise that hierarchically younger cognitive items will be affected before those more antecedent.

Based on the conclusions reached above, and expecting the path of least resistance to be followed, the psychosocial theory prediction would be that male homosexuals would alter that expectation learned last: to expect high PA from others. One would anticipate the ultimate result to be for PA to decline significantly within the male homosexual subculture, where high PA is expected from neither party.

Among lesbians, who would be expecting high PA from self but be tolerant of low PA from others (like heterosexual women), a similar impasse would not occur. In this instance PA levels would be either equal to those of the society at large, or slightly lower as a lack of reinforcement caused the expectations from self to gradually decline. In fact, the latter seems to characterize the evident pattern: "We were highly visible and vocal Lesbian feminist organizers, a little grungy and eccentric in jackets and baggy pants, for we did not have a stake in what we looked like" (Grahn 1984:191).

Although the lesbian circumstance is accounted for by the psychosocial theory, male homosexual reality is in direct opposition to that predicted. Not only do male homosexuals prefer partners more attractive than themselves, but PA is the most significant variable--almost to the exclusion of all others--in determining liking, at least in initial encounters (Sergios and Cody 1986). Further, according to a 1986 Advocate article, when Conde Nast acquired the men's fashion magazine GQ, insiders reported explicit desires to "dehomosexualize" its presentation. Clearly, male homosexuals are at least as expectant of high PA in others as are male heterosexuals.

The failure of this psychosocial model to account for this feature of PA phenomena opens the door to other theories, such as sociobiology, which may, and, as will be shortly seen, will do a better job. We leave this theory, therefore, with the conclusion that it does not accurately (i.e., "truthfully") describe PA phenomena relating to male/female differences.

SOCIOBIOLOGICAL REINTERPRETATION

The impasse mentioned above, then, is apparently resolved by the individual raising his expectations of PA level for himself, not by lowering those for others. How, then, to explain this seeming paradox, that the more fundamental expectations--as far as learning theory would be concerned--are altered in lieu of the cognitively more distant? Why alter perceptions of self when the option exists to alter conceptions of others?

This contradiction may be cleared up after first reporting two other findings of the PA literature. First, despite the common wisdom that "beauty is in the eye of the beholder," "people's perceptions of another person's physical attractiveness can be accurately predicted" (Patzner 1985:17; but see Donovan, Hill, and Jankowiak 1989). This truth-of-consensus method has proven to be experimentally valid in characterizing global perceptions of PA, even though at this level the exact determinants used by the judges to arrive at such consensus remain obscure.

Such uniformity of agreement about what is attractive and what is not might be explained as a conforming to a cultural stereotype, but such response would not explain a second PA phenomenon, the "cute response" introduced by Lorenz. Apparently, a particular constellation of morphological facial features (e.g., "big eyes in a round head") evokes a predictable (in this case,

maternal) response, and this aspect of PA phenomena is one humans share with other mammals (Jolly 1985).

As a whole, the literature allows entertainment of the possibility that, at a general level, biological inclination might impact upon our criteria for evaluation of PA. Cunningham (1986) investigated this hypothesis and found that positive female PA evaluations were significantly related to facial characteristics so subtle as requiring measurement in millimeters (e.g., pupil width). The fact that such nuances are accurate predictors of PA ratings, while a more obvious measure such as the female bust "has not proven statistically significant" (Patzner 1985:144), might suggest that male evaluation of female PA is not entirely a learned skill. Some of it may be innate.

This possibility would in fact allow resolution of the above discussed contradiction regarding the male homosexual's treatment of PA evaluation. In a very broad sense, PA evaluation of others may be "hardwired" both in terms of whether PA will be of paramount importance in evaluations, especially of potential mates (for males, yes; for females, no), and of what cues will be incorporated into these evaluations.

On the first point, Symons (1979) argues that this feature of male psychology is to their reproductive advantage, allowing them to be easily stimulated sexually. Copulating as many times as possible is in male reproductive interests since sperm is "cheap"; conversely, since eggs are "expensive," women cannot afford to succumb sexually to every beautiful man but must become selective by concentrating on other criteria such as social status. The conclusion drawn is that, yes, males do demand high PA from their potential mates, but that this is encoded and not learned.

If men have reason to value PA in mates, the cues used in these judgements should be of a particular type. As Buss and Barnes (1986:569) state the case,

Women's reproductive value and fertility are closely tied to age and to health. Aspects of physical appearance such as smooth and clear skin, good muscle tone, lively gait, white teeth, and lustrous hair are proximate cues to age and health. Therefore, past selection has favored men who enact a preference for those physical attributes (beauty) that are strong cues for age and health, and hence for reproductive capacity.

These expositions provide the theoretical framework with which to support the following claim: Psychosocial sex-role socialization theory argues that male expectation of high PA from mates is learned behavior; sociobiology, on the other hand, holds that this expectation is instinctive, and while it may be culturally molded and directed, it is not created.

Reevaluating our impasse in this light, we notice a subtle difference. All of the psychosocial discussion is still held to be valid; only this time, male expectation of high PA in mates precedes all learning, even expectations from self. Thus, the principle that things less fundamental will be changed before those more fundamental still pertains: the male homosexual alters the demands of PA from self (a learned attribute) rather than his demands of PA from others (a biological endowment). This slight alteration will describe all the data that the previous model did but accurately describes behaviors of male homosexuals as well, something the psychosocial model could not do alone.

CONCLUSIONS

For at least this small arc of the spectrum of human behavior, the core sociobiological concept of male/female differences in reproductive strategies generates a better model to describe male/female differences in treatment of PA than does a purely psychosocial model. This result is contrary to the expectations of 55% of cultural anthropologists (Lieberman 1989). Note also that incorporation of sociobiology requires only a small revision of the first model, not a complete supercession. Both theories working together are needed to produce a single model which most completely describes the known data.

As such, it is difficult to appreciate the contention of Lieberman's survey respondents that sociobiology is not useful for an understanding of human behavior. Clearly, such a biological strategy is not necessary in studies of all areas of human culture, but likewise those theories which completely avoid any "taint" of biology are apt to be less than they might.

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